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1980

Draft section
4(f) statement,
administrative
action for project
DP280-1(1)11, York
Bridge approaches

ION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 8

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

STATE DOCUMENTS COLLECTION

JUN 27 1989

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HELENA, MONTANA 59620

DRAFT
SECTION 4(f) STATEMENT
ADMINISTATIVE ACTION
for
PROJECT DP 280-1(1)11
YORK BRIDGE AND APPROACHES

PLEASE RETURN

THIS HIGHWAY IMPROVEMENT IS PROPOSED FOR FUNDING UNDER TITLE 23, U.S.C. THIS STATEMENT FOR THE IMPROVEMENT WAS DEVELOPED IN CONSULTATION WITH THE FEDERAL HIGHWAY ADMINISTRATION AND IS SUBMITTED PURSUANT TO 23 U.S.C. 138.

RONALD P. RICHARDS, DIRECTOR OF HIGHWAYS

9-3-80
Date

By Jack R. Beckert
Jack R. Beckert, Administrator -
Engineering Division

APPROVED AND ADOPTED BY THE FEDERAL
HIGHWAY ADMINISTRATION

Duane E Lewis
Duane E. Lewis, Acting Division Admin.

9/3/80
Date
310E

MONTANA STATE LIBRARY
S 388.1 H3ssyb 1980 c.1
Draft section 4(f) statement, administra
3 0864 00063462 9

Reviewer:

The following Draft Section 4(f) Statement is to document the various studies and meetings that were involved in arriving at a determination that there are no prudent and feasible alternatives to the use of the 4(f) property commonly known as the York Bridge.

Comments and questions will be accepted for 45 calendar days after the receipt of this letter. If no communications occur during this time period it will be assumed the person or agency does not have any comments. All comments should be sent to:

Preconstruction Bureau
Montana Department of Highways
2701 Prospect
Helena, MT 59601

ML/pz/4K

STATEMENT ON BEHALF OF GOVERNOR THOMAS L. JUDGE, GOVERNOR OF THE STATE OF MONTANA, ON THE U. S. FOREST SERVICE PROPOSAL TO CLASSIFY THE ABSAROKA PRIMITIVE AREA, THE BEARTOOTH PRIMITIVE AREA, AND CONTIGUOUS LANDS WITHIN THE NATIONAL WILDERNESS PRESERVATION SYSTEM

Located within Montana are some of the most precious acres of wilderness area in our nation. These public lands, due to their ruggedness and remoteness, have escaped the evasive inroads of mechanized man and, thereby qualify for inclusion into our national wilderness preservation system--a protective status which only congressional wilderness classification affords. Once classified, wild lands like that of the Absaroka-Beartooth provide residents and visitors to our State with the unforgettable opportunity to visit and enjoy wilderness areas. Moreover, people throughout the country find satisfaction simply in the knowledge that in this nation there still exist areas where man is only a wayfarer who does not remain as a permanent resident. But, most important, wilderness areas offer all of us the opportunity to see America as it once was, thereby preserving a part of our national heritage for future generations.

I take this opportunity to commend the United States Forest Service for spending untold hours preparing an inventory of the existing natural resources of the wild lands known as the Absaroka-Beartooth, and for making its findings known to the public. After reviewing the Forest Service proposal and conferring with Montana's natural resource agencies, I respectfully submit Montana's views on the future management of these lands.

I feel that a wilderness classification for the Absaroka-Beartooth region will protect the multiple uses of the area, which include ecosystem integrity, watersheds, recreation, natural areas, fisheries and wildlife habitat. The State of Montana believes that the scenic beauty and natural solitude of this area is of such value that its significance

cannot be over-estimated. The large and unbroken expanse of the Absaroka-Beartooth wilderness area represents a variety of land forms and life forms, offering what could possibly be the most spectacular wilderness in this country.

The Forest Service wilderness proposal provides a sound and commendable basis for the necessary revisions which must now take place in the public arena. To this end, the State of Montana supports a wilderness classification for the Absaroka-Beartooth and we recommend the following:

1. That all qualified lands be classified to provide the maximum wilderness area possible.

2. That the Absaroka-Beartooth area be classified as one wilderness unit, rather than being fragmented into three separate units.

3. That Congress be given the opportunity to consider, as a unified whole, all qualified lands within and adjacent to the Absaroka-Beartooth primitive areas within the ten year review period provided for in Section 3(b) of the Wilderness Act of 1964.

I have asked the state's natural resource agencies to provide the Forest Service with a specific boundary recommendation prior to the closing of the hearing record on April 30, 1974.

Thank you for the opportunity to present testimony on behalf of the State of Montana.

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Helena Chamber of Commerce President, 201 East Lyndale, Helena, MT 59601
Montana Power Company, 1315 North Main Street, Helena, MT 59601
U.S. Bureau of Reclamation, 7661 Canyon Ferry Road, Helena, MT 59601
Mr. William Bucher, 6929 Nelson Road, Helena, MT 59601
Mr. Gordon Hopperstad, 8059 York Road, Helena, MT 59601
Mr. William Bronson, 7513 York Road, Helena, MT 59601
Mr. John Arnold, York Road, Helena, MT 59601
Mr. Robert Latham, 7429 York Road, Helena, MT 59601
Mr. Edgar Lilletvedt, 7459 York Road, Helena, MT 59601
Mr. Melvin Koehler, 7413 York Road, Helena, MT 59601
Mr. Gary Koeher, 7383 York Road, Helena, MT 59601
Mr. John Woods, 6752 York Road, Helena, MT 59601
Mr. Fred Weber, 9181 York Road, Helena, MT 59601
Mr. Robert C. Casey, 9177 York Road, Helena, MT 59601
Mr. Jerry McCauley, 7027 York Road, Helena, MT 59601
Mr. George Peterson, 6963 York Road, Helena, MT 59601
Mr. John Flatt, 8283 York Road, Helena, MT 59601
Environmental Protection Agency, Deputy Regional Administrator, Region VIII, Suite 900, 1960 Lincoln Street, Denver, CO 80203
Federal Housing Administration, Housing and Urban Development, Office of the Director, Federal Office Building, 301 South Park Avenue, Drawer 10095, Helena, MT 59601
Montana Automobile Association, P. O. Box 4129, Helena, MT 59601
Montana Stockgrowers Association, Office of the Secretary, P. O. Box 1679, Helena, MT 59601
Montana Historical Society, State Historic Preservation Officer, Veterans' Memorial Building, 225 North Roberts Street, Helena, MT 59601
Center for Balanced Transportation, P. O. Box 931, Bozeman, MT 59715
Department of Anthropology, University of Montana, Missoula, MT 59801
Montana State University, Department of Anthropology, ATTN: Dr. Les Davis, Bozeman, MT 59715
Montana State University, Institute of Applied Research, Bozeman, MT 59715
Mr. Richard P. Graetz, P. O. Box 5630, Helena, MT 59601
Sierra Club (Central), Upper Missouri Group, c/o Adela Awner, P. O. Box 515, Helena, MT 59601
The Wilderness Society, 4260 East Evans Avenue, Denver, CO 80222
Montana Wildlife Federation, P. O. Box 4373, Missoula, MT 59806
Department of the Army, Omaha District Corps of Engineers, 7410 U.S. Post Office and Courthouse, Omaha, NE 68102
U.S. Department of Transportation, United States Coast Guard Commander (OAN), Thirteenth Coast Guard District, 915 Second Avenue, Seattle, WA 98174
U.S. Department of Transportation, Federal Aviation Administration, Rocky Mountain Region, A.R.M. 615, 10455 East 25th Avenue, Aurora, CO 80010
U.S. Department of the Interior, Bureau of Land Management, Montana State Office, P. O. Box 30157, Billings, MT 59107
U.S. Department of the Interior, U.S. Geological Survey, MS-104, Chief, Environmental Impact Assessment Program, Reston, VA 22092

U.S. Department of the Interior, Bureau of Mines, Chief, Western Field Operation Center, East 315 Montgomery, Spokane, WA 99207
U.S. Department of the Interior, U.S. Geological Survey, WRD, Federal Building, Room 428, Drawer 10076, 301 South Park Avenue, Helena, MT 59601
U.S. Fish and Wildlife Services, ATTN: Area Manager, Federal Building, Room 3035, 316 North 26th Street, Billings, MT 59101
U.S. Department of the Interior, Water & Power Resources Service, Regional Director, Region U M, P. O. Box 2553, Federal Office Building, Billings, MT 59103
U.S. Department of the Interior, Heritage Conservation & Recreation Service, Regional Director, Mid-Continent Region, P. O. Box 25387, Building 41, Denver Federal Center, Denver, CO 80225
U.S. Department of the Interior, National Park Service, Regional Director, Rocky Mountain Region, P. O. Box 25287, 655 Parfet Avenue, Denver, CO 80215
U.S. Department of the Interior, Missouri River Basin, Special Assistant to the Secretary, Room 688, Building 67, Denver Federal Center, Denver, CO 80225
U.S. Department of the Interior, Bonneville Power Administration, Environmental Coordinator, P. O. Box 3621, Portland, OR 97208
U.S. Department of Transportation, Federal Highway Administration, 301 South Park Avenue, Drawer 10056, Helena, MT 59601 HDA-MT
Department of Fish, Wildlife & Parks, Assistant Administrator, Environment and Information Division, 1420 East Sixth Avenue, Helena, MT 59601
Department of Natural Resources and Conservation, Office of the Director, 32 South Ewing, Helena, MT 59601
Department of State Lands, Office of the Commissioner, 1625 Eleventh Avenue, Helena, MT 59601
Department of Natural Resources and Conservation, ATTN: Administrator, Conservation District Division, 32 South Ewing, Helena, MT 59601
Environmental Quality Council, Office of the Director, P. O. Box 215, Capitol Post Office, Helena, MT 59601
Department of Fish, Wildlife & Park, Administrator, Recreation and Parks Division, 1420 East Sixth Avenue, Helena, MT 59601
Department of Community Affairs, Aeronautics Division, P. O. Box 5178, Helena, MT 59601
Department of Health and Environmental Sciences, Air Quality Bureau, ATTN: Mr. Henry W. Custin, Environmental Planner, Cogswell Building, Helena, MT 59601
Department of Health and Environmental Sciences, Mosquito Abatement Advisory Council, ATTN: Dr. Kenneth L. Quickenden, Board of Health Building, Helena, MT 59601
Department of Health and Environmental Sciences, Water Quality Bureau, ATTN: Mr. Donald G. Willems, Board of Health Building, Helena, MT 59601

MAL:cg:310D

DRAFT
SECTION 4(f) STATEMENT
DP 280-1(1)11 - YORK BRIDGE AND APPROACHES

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EXHIBITS

Exhibit 1	Location Map
Exhibit 2	Aerial Photos of the York Bridge
Exhibit 3	Old Bridge Plans
Exhibit 4	New Bridge (Steel Girder Option)
Exhibit 5	New Bridge (Concrete Beam Option)
Exhibit 6	Aerial Photo of Alternates
Exhibit 7	Determination of Eligibility
Exhibit 8	Memorandum of Agreement

DRAFT
SECTION 4(f) STATEMENT
DP 280-1(1)11 - YORK BRIDGE AND APPROACHES

I. NEED

The York Bridge is a one-lane bridge owned by the Lewis and Clark County and located approximately 16 miles northeast of Helena (see Exhibits 1 & 2). In the fall of 1978 an unsafe structural problem was discovered on the west bridge pier. Further investigations led to the closure of the bridge. The residents of York and the surrounding area have been detoured to Route FAS 284 since the closure of the bridge. The closure of the bridge has been a great inconvenience.

II. PROJECT DESRIPTION

This project will consist of the construction of a new 1100 foot bridge across the Missouri River (commonly known as Hauser Lake) with minimal approach work on Secondary Route 280. The new two-lane bridge will be located upstream from the present York Bridge approximately 730 feet from the west end of the existing bridge and at a distance of 150 feet from the east end of the existing bridge. The two options being considered for this bridge are a concrete beam bridge or a steel girder bridge with the determination being made according to the bids submitted (see Exhibits 4& 5). Riprap and fill material placement will be above high water line, and design features have been incorporated in response to aesthetic considerations for this environmentally sensitive area. A causeway alternative has been ruled out.

An assessment of the impact of this project was documented in an Agency Impact Determination in 1976. This document is included in Section VII.

III. DESCRIPTION of 4(f) INVOLVEMENT

The York Bridge has been reviewed by the U.S. Heritage Conservation and Recreation Service and determined to be eligible for nomination to the Register of Historic Places by the Keeper of the Register (see Exhibit 7). This historical eligibility combined with the removal of the existing bridge (removal will be included in the contract for the construction of the new bridge) qualify this undertaking as a 4(f) involvement. The documentation sent to the Keeper is in Section VII and includes the Historic American Engineering Record forms which proivde a vivid description of the York Bridge.

The criteria that establishes this bridge on the Register is the history of the bridge that is associated with the building of the Hauser Dam and the Helena Power Transmission Company, and with Anton Holter and Samuel Hauser.

IV. ALTERNATIVES

Four alternatives were proposed for the location of the new bridge. These alternates are indicated on Exhibit 6. Alternate 1 is the location chosen for the new bridge and represents a balance in cost, satety standards and environmental factors.

Other alternatives away from the York Bridge were not considered feasible due to the mountainous terrain, the fact that there are no other logical crossings of Hauser Lake, and because of the fact that the existing roadways on both sides of the lake are dependent upon a bridge in this general area.

It does not appear that new bridge construction at the chosen location (Alternate 1) or at any other location would have an adverse effect upon the York Bridge. The presence of the new bridge at the chosen location will be at an average distance of 440 feet which will alter the setting somewhat but would not adversely affect the quality of the historical characteristic that qualified the bridge for listing, i.e., the assoication of persons significant in state and local history. The old bridge obviously cannot be used as a work bridge during construction. The contractor will probably accomplish the work using barges.

Rehabilitation is the only alternative that would avoid 4(f) involvement, ie., the removal of the bridge. This alternative was investigated after an unsafe structural condition was discovered in the fall of 1978 which subsequently required the closure of the bridge.

The west river pier was seriously damaged just two years after the bridge's construction when Hauser Dam collapsed in 1908. The powerful scouring from when the dam washed out caused all piers to settle (see Exhibit 3). Our agency has studied the possibility of straightening the bridge's vertical alignment and then stabilizing the pier. The many uncertainties involved in test loading the bridge; reinforcing the failing pier; determining the condition of the original timber pilings; and even locating bedrock or a stratum more soid than sandy gravel have led all investigations in refurbishment to the same conclusion: There is no way of assuring that the York Bridge can be made safe for even light vehicular traffic. While the cost of trying to stabilize the bridge for restricted traffic loads is not seen as prohibitive, the makeshift nature of this effort would simply not be practical based on engineering and geotechnical considerations. Furthermore, the liability associated with reopening the bridge would be a tremendous burden to be assumed by the County or State.

At the Public Hearing for the project held in York on May 17, 1977, mention was made of allowing the bridge to remain standing but closed to traffic after construction of the new bridge. A week after the meeting, a petition was circulated among York inhabitants and submitted to the Department which included the recommendation to remove the existing bridge with the piers truncated below the low water level for the sake of aesthetics and boater safety. The County has also requested that the York Bridge be removed, preferably undertaken as part of the construction contract. Removal of the County's bridge will be included as a unit of this construction project and federal funds will be used. The notion to retain the old, unused bridge has not been popular since is structural deficiency became apparent. The County Commissioners have indicated they prefer no reuse of the existing bridge.

The "Do Nothing" Alternate would leave the bridge closed to traffic and would leave the community of York isolated. This is not acceptable and will not be considered further.

V. AREA AFFECTED

The existing bridge will be dismantled and removed from the present site. This work will be included as part of the contract for the new bridge. The approaches to the existing bridge will be converted to a recreational use.

VI. MITIGATION MEASURES

Mitigation measures will include photographing and recording the existing structure in accordance with Historic American Engineering Record standards. Information from the Historic American Engineering Record, along with copies of the original plans and other historical information, will be bound in booklets and given to the Lewis and Clark Library and the Montana Historical Society Museum. A sign indicating historical information located in the vicinity of the existing bridge was suggested as a mitigation measure but was rejected. Vandalism and maintenance were stated as problems with locating a sign such as this on a secondary road.

VII. COORDINATION

After the Public Hearing in 1977, it was determined that removal of the existing bridge was preferred by both the County Commissioners and the people of York and the surrounding area. The historic character of the York Bridge indicated a possible nomination to the Register so the historic research was initiated at that time. After extensive research, the bridge was determined to meet the criteria for listing on the National Register of Historic Places.

Agreement has been reached with the County Commissioners, State agencies and the State Historic Preservation Officer that it is not reasonable and prudent to rehabilitate the old bridge and that a new bridge on the proposed alignment (Alternate 1, Exhibit 6) is the proper solution. A proposed Memorandum of Agreement, together with mitigation stipulations (Exhibit 8), have been forwarded to the Advisory Council on Historic Preservation for their consideration.

The following includes some of the documentation and coordination compiled in the historic and environmental review of the York Bridge.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION EIGHT
Montana Division
Federal Office Building
301 S. Park, Drawer 10056
Helena, Montana 59601

June 24, 1980

IN REPLY REFER TO:
HEB-MT

RS 280-1(1)
York Bridge

Ms. Carol D. Schull
Acting Keeper of the Register
U. S. Department of the Interior
Heritage Conservation and Recreation Service
Washington, D. C. 20240

Dear Ms. Schull:

Submitted herewith is information relative to the historical and structural significance of the York Bridge, a 78-year old structure spanning Hauser Lake or the Missouri River mainstream in Lewis & Clark County, Montana. We are providing this material for your use in making a determination of eligibility for the National Register of Historic Places.

The attached HAER inventory sheets were completed as part of an on-going statewide inventory project that HAER is conducting under contract with the Montana Department of Highways. This inventory will catalog all bridges over 45 years old and will aid in Section 106 compliance by providing a context in which structures throughout the State can be evaluated in terms of their historical and engineering significance. Although much information has been collected to date, our ability to evaluate an individual bridge within some comprehensive framework is limited. We have comparative data, but it presents a somewhat fragmented picture.

The York Bridge is similar to other bridges in the state; there is a pin connected bridge at Corwin Springs with an almost identical configuration, a similar single truss pin-connected bridge over the Milk River at Wagner, and a bridge at Ulm with the same configuration, but riveted rather than pin-connected.

Though structurally the York Bridge lacks distinction, the circumstances surrounding its construction may be of historical interest. The fairly complex business transactions associated with it are detailed in the cultural resource reconnaissance report for the bridge replacement project proposed in the vicinity of the existing bridge. The affairs of the local magnates responsible for the bridge's construction exemplify how compromise in the variety of interests worked to benefit the area's economy. The York Bridge had a secondary relationship with the careers of these capitialists, and played a minor role in hydroelectric development of the Missouri River.

Construction of bridges of this vintage was never incidental since they ordinarily provided a vital link necessary for the growth of an area.

The existing bridge is closed to traffic because it is hazardous due to a serious foundation failure and the Department of Highways and the Federal Highway Administration consider it to be beyond reasonable repair.

We are requesting that the State Historic Preservation Officer comment on the York Bridge's eligibility for nomination to the National Register. We defer to your opinion on the applicability of the National Register criteria and request that our remarks also be considered in making the determination of eligibility. If more information is required, please contact our office.

H N Stewart

H. N. Stewart, Division Administrator
Federal Highway Administration

Ronald R. Richards, Director
Montana Department of Highways

I believe the York bridge is ☒
is not ☐
Eligible for nomination to the
National Register of Historic Places

S/I

Dr. Robert Archibald SHPO

Bill Dunbar
F.H.W.A.

United States Department of the Interior

HERITAGE CONSERVATION AND RECREATION SERVICE
WASHINGTON, D. C. 20243

IN REPLY REFER TO:

June 16, 1980

Mr. Steve Kologi, P.E., Chief
Preconstruction Bureau
Department of Highways
2701 Prospect
Helena, MT 59601

Dear Mr. Kologi:

You have asked me to state my opinion on the eligibility of the York Bridge for inclusion on the National Register. I believe the bridge is eligible and this letter will detail my reasons for that belief.

The York Bridge is a pin-connected Pennsylvania through truss structure not unlike other pin-connected Pennsylvania trusses found in the state. As such it is not of particular significance for structural or engineering reasons. It is, however, representative of the type and also of some interest because its piers support it not above a river but above the deeper waters of the Hauser Dam Reservoir.

The York Bridge gains its significance, and therefore may be eligible for the National Register, because of its historic associations with the building of the Hauser Dam, with the Helena Power Transmission Company and with Anton Holter and Samual Hauser. Holter and Hauser were both prominent figures in the political and economic development of the Montana territory and the State of Montana. The Helena Power Transmission Company and its Hauser Dam were significant early developments in the electrification of the State. Prior to construction of the dam, there were several ferries and numerous roads along the Missouri River where the reservoir was to form. Lewis & Clark County had plans for a bridge to replace the ferries; however, the presence of a reservoir would increase the cost of a bridge and would destroy the roads along the river which had been built at county expense.

Through the negotiating efforts of Hauser and Holter, officers of Helena Power Transmission Company, an agreement was reached whereby what is now known as the York Bridge would be built by HPT Co. with the county contributing funds equal to what a bridge without the reservoir would have cost and with HPT Co. paying the difference. The county then agreed not to charge damages against the road loss to encourage development of the hydroelectric facility. The coming of electric power to the State had significant social, economic and technological impacts on the state and the building of the York Bridge was a significant element in the construction of this early hydroelectric development in the State.

The York Bridge was built across the waters of the Hauser Dam Reservoir in 1906. The dam gave way in 1908 and the force of water rushing out of the reservoir damaged the bridge piers. However, the bridge survived and was repaired. This fact perhaps adds to the significance of the bridge.

If I can be of further assistance in the determination of eligibility process, please contact me.

Sincerely.

Fredric L. Quivik

Fredric L. Quivik
Historian
Historic American Engineering Record

DV:FLQ:cg:1F

cc: Dr. Robert Archibald, SHPO
~~Bill~~ Dunbar, FHWA
G. L. Larson
L. S. Harris
Dr. T. Allan Comp, HAER

MONTANA DEPT. OF
RECEIVED
MAY 31 1979

MONTANA HISTORICAL SOCIETY
HISTORIC PRESERVATION OFFICE
225 NORTH ROBERTS STREET • (406) 449-4584 • HELENA, MONTANA 59601

May 29, 1979

Mr. Stephen C. Kologi, PE, Chief
Preconstruction Bureau
Department of Highways
Helena, MT 59601

DP 280-1 (1)
York Bridge

Dear Mr. Kologi:

The York Bridge appears to meet the criteria for listing on the National Register of Historic Places. It meets criteria B in that it is associated with Samuel Hauser and Anton Holter, who are of state historic development of the state in the fields of commerc industry, stock raising, transportation, and politics.

I concur in your opinion that the site should be evaluated by H.A.E.R. to determine it if meets criteria C and is of significance in its construction.

The report recommends "no further mitigation" in the proposed construction area for a new bridge. I assume this to be a misunderstanding of the terminology by the contracting achaeologist. No mitigation report accompanies your submission. I am sure you understand that no mitigation of historic properties should ever be undertaken by your department until you have consulted with this office and the Advisory Council on Historic Preservation. If the contractor is correct in his statement, please submit the mitigation report for review, and instruct him not to undertake any migitative measures until such time as he is authorized to do so.

Thank you for consulting with me.

Sincerely,

Kar Korte
State Historic Preservation Officer

KK/EV/jc

Date Recd. Preconst.

Act	Info	MAIL ROUTE
		38
		[illegible]

HAER INVENTORY

Historic American Engineering Record
Department of the Interior, Washington, D.C.

1. SITE ID NO

2. INDUSTRIAL CLASSIFICATION: B, T & A TRUSS: STEEL | 7 6 0 3
Pennsylvania Through
State (FAS280-13.64);STR#66

3. PRIORITY: 2

4. DANGER OF DEMOLITION? ☒ YES ☐ NO ☐ UNKNOWN
(SPECIFY THREAT) county may demolish bridge

5. DATE: 1906

5. GOVT SOURCE OF THREAT: OWNER / DOWN

7. OWNER/ADMIN: Lewis & Clark County

8. NAME(S) OF STRUCTURE: Trout Creek Bridge, York Bridge

9. OWNER'S ADDRESS:
Lewis & Clark County
Helena, MT 59601

10. STATE: MT COUNTY | COUNTY NAME: Lewis & Clark | CITY/VICINITY: York | CONG. DIST.

STATE | COUNTY | COUNTY NAME | CITY/VICINITY | CONG. DIST.

11. SITE ADDRESS (STREET & NO.): Secondary Road: 280 (York Road)

12. EXISTING SURVEYS: ☐ NR ☐ NHL ☐ HABS ☐ HAER-I ☐ HAER ☐ NPS ☐ CL.. ☐ CONF ☒ STATE ☐ COUNTY ☐ LOCAL ☐ OTHER

13. SPECIAL FEATURES (DESCRIBE BELOW): ☐ INTERIOR INTACT ☐ EXTERIOR INTACT ☐ ENVIRONS INTA

14. UTM ZONE | EASTING | NORTHING | SIGN | SCALE ☐ 1:24 ☐ 1:62.5 ☐ OTHER | QUAD NAME

UTM ZONE | EASTING | NORTHING | SIGN | SCALE ☐ 1:24 ☐ 1:62.5 ☐ OTHER | QUAD NAME

15. CONDITION: 70 ☐ EXCELLENT 71 ☐ GOOD 72 ☐ FAIR 73 ☒ DETERIORATED 74 ☐ RUINS 75 ☐ UNEXPOSED 76 ☐ ALTERED 62 ☐ DESTROYED 63 ☐ DEMOLISH

16. INVENTORIED BY: Gray Fitzsimons | AFFILIATION: HAER/Montana State Bridge Inventory | DATE: 8/18/79

17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT AND IMPORTANT BUILDERS, ENGINEERS, ETC.

The Minneapolis Steel & Machinery Co. of Minneapolis, Minnesota received the contract to construct the highway bridge across the Missouri River in June, 1906. The proposal for a three span, pin-connected Pennsylvania through truss (180 feet per span and 16 feet wide throughout) was accepted by the county commissioners. The bridge would cost $20,000 and replace the existi ferry traffic crossing the Missouri River near Trout Creek. The highway bridge was to serve as access to the Belt Mountain region for miners and ranchers. Construction of the Trout Creek bridge (also known as the "York Bridge") coincided with the building of the Hauser Dam some one and one half miles downstream. The "York Bridge" was completed in Dec. 1906 and spanned the waters of the newly formed Hauser Lake. The Hauser Dam, constructed by the Helena Pow

18. ORIGINAL USE: Bridge/ Vehicular | PRESENT USE: Bridge/ Closed to traffic | ADAPTIVE USE

19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS AND/OR OTHER

State of Montana, Dept. of Highways-- Maintenance Division; York Bridge File; S, I & A Sheet 1
Minutes: Lewis & Clark County Commissioners meetings June 19, 1906 (Lewis & Clark County
Courthouse, Helena, MT)
Minutes: Lewis & Clark County Commissioners meetings Dec. 1, 1906 (County Courthouse, Helena

20. URBAN AREA 50,000 POP OR MORE? ☐ YES ☒ NO

21. HCRS REGION

22. PUBLIC ACCESSIBILITY: ☒ YES, LIMITED ☐ YES, UNLIMITED ☐ NO ☐ UNKNOWN

23. EDITOR / INDEXER

25 PHOTOS AND SKETCH MAP OF LOCATION

DESCRIPTION (CONTINUED)

Transmission Company, collapsed in 1908 and the entire contents of the lake soon emptied. The scouring action of the rusing water against the piers of the bridge seriously damaged the subst ture. The west river pier was the most severely damaged as it settled nearly six feet. G.S. Edmonstone, a consulting engineer, was hired by the county to recommend plans for reconstructio of the damaged bridge. Edmonstone made the following recommendations: remove the west river pi replace it with new encased concrete steel tubular piers, pour concrete reinforcement at the

REFERENCES (CONTINUED)

base of this pier and return, the bridge to proper elevation by installing steel rocker bents atop the west river pier. These plans were accepted, the work was carried out and the bridge was soon re-opened for traffic. Alleged further scouring action over (contd. next s

ABSTRACT

HAER INVENTORY

Historic American Engineering Record
Department of the Interior, Washington, D.C.

1 SITE I.D. NO

2 INDUSTRIAL CLASSIFICATION

CONTINUED FROM SHEET # 1

State (FAS280-13.64);STR#66

3 PRIORITY

4 DANGER OF DEMOLITION? (SPECIFY THREAT) ☐ YES ☐ NO ☐ UNKNOWN

5 DATE

6 GOVT SOURCE OF THREAT — OWNER — ADMIN

7 OWNER/ADMIN
Lewis & Clark County

8 NAME(S) OF STRUCTURE
Trout Creek Bridge, York Bridge

9 OWNER'S ADDRESS

10 STATE COUNTY — COUNTY NAME — CITY VICINITY — CONG DIST

STATE COUNTY — COUNTY NAME — CITY-VICINITY — CONG DIST

11 SITE ADDRESS (STREET & NO.)
Secondary Road: 280 (York Road)

12 EXISTING SURVEYS ☐ NR ☐ NHL ☐ HABS ☐ HAER—I ☐ HAER ☐ NPS ☐ ☐ CONF ☐ STATE ☐ COUNTY ☐ LOCAL ☐ OTHER

13 SPECIAL FEATURES (DESCRIBE BELOW) ☐ INTERIOR INTACT ☐ EXTERIOR INTACT ☐ ENVIRONS INT.

14 UTM ZONE — EASTING — NORTHING — SIGN — SCALE ☐ 1:24 ☐ 1:62.5 ☐ OTHER — QUAD NAME

UTM ZONE — EASTING — NORTHING — SIGN — SCALE ☐ 1:24 ☐ 1:62.5 ☐ OTHER — QUAD NAME

15 CONDITION 70 ☐ EXCELLENT 71 ☐ GOOD 72 ☐ FAIR 73 ☐ DETERIORATED 74 ☐ RUINS 75 ☐ UNEXPOSED 76 ☐ ALTERED 82 ☐ DESTROYED 81 ☐ DEMOLISHED

16 INVENTORIED BY — AFFILIATION — DATE

17 DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S) HISTORICAL DATE(S) PHYSICAL DIMENSIONS MATERIALS EXTANT EQUIPMENT AND IMPORTANT BUILDERS, ENGINEERS ETC

(CONTINUED) the last 70 years has undermined the massive concrete reinforcement of the west river pier to such an extent that a measurable tilting of the pier facilitated the closing of the bridge in 1978. The superstructures, however, remain in fair condition and consist as follows: lower chords are forged steel eyebars; diagonal members are subdivided and are either eyebars or eyebars with turnbuckles; vertical members are subdivided and are either forged eyebar or laced channel sections; and the upper chords are continuous steel plates riveted atop channel sections with lacing bars riveted along the bottom flanges. Sway bracing is provided with laced angle sections and each truss consists of ten panels, 18 feet in length. The floor system consis of a plank deck resting on 13 lines of timber stringers, all supported by steel I-beam

(CONT'D)

18 ORIGINAL USE — PRESENT USE — ADAPTIVE USE

19 REFERENCES—HISTORICAL REFERENCES PERSONAL CONTACTS AND/OR OTHER

(CONT'D)

20 URBAN AREA 50,000 POP OR MORE? ☐ YES ☐ NO

21 HCRS REGION

22 PUBLIC ACCESSIBILITY ☐ YES, LIMITED ☐ YES UNLIMITED ☐ NO ☐ UNKNOWN

23 EDITOR — INDEXER

24 LOCATED IN AN HISTORIC DISTRICT?

22. PHOTOS AND SKETCH MAP OF LOCATION

DESCRIPTION (CONTINUED)

(15I42) floor beams. Presently, a new bridge is under design and may possibly be located upstream from the old "York Bridge." There are no plans to re-open the damaged structure and it may eventually be demolished.

REFERENCES (CONTINUED)

Nameplate on bridge

ABSTRACT

MONTANA HISTORICAL SOCIETY

HISTORIC PRESERVATION OFFICE

225 NORTH ROBERTS STREET • (406) 449-4584 • HELENA, MONTANA 59601

August 21, 1980

Mr. Louis S. Wall
Assistant Director
Advisory Council on Historic Preservation
P.O. Box 25085
Denver, CO 80225

Dear Lou:

Within the past week, the Federal Highway Administration and Montana State Department of Highways have asked us to review a preliminary case report and memorandum of agreement on the demolition of the York Bridge, Lewis and Clark County Montana, and construction of a new bridge. This letter constitutes the State Historic Preservation Officer's report on the undertaking, which has been assessed here as having an adverse effect. Our comments are offered in outline form below.

Significance of the Property

We recommended the York Bridge as eligible for the National Register. Based on work done by the HAER/Montana Department of Highway Inventory, it is a good representative of bridge construction of that era, but not unusual. Its greater significance lies in the power development/communi need compromise that it represented and the association that the very small community of York might have with a structure that has been its single critical access route for 70 years.

Effect of the Undertaking

Demolition of the structure is clearly an adverse effect.

Alternative to the Undertaking

This discussion relates also to the discussion of local positions.

The York Bridge clearly does not meet--by virtue of width and approach curvature--current highway standards. Its replacement was considered necessary prior to its 1977 closure. Hence, we do not perceive a alternative to that. The only alternatives pertinent to the situation relate to what happens to York Bridge when a new bridge is constructed.

While we have not reexamined ourselves the feasibility of cost, safety, liability,and combined maintenance of the old bridge as a bike or walkway, retaining the original structure as an alternative is not recommended in the context of local sentiment.

Alternatives lie in forms of mitigation, but not in our judgment to the entire undertaking.

Local participation in preservation--Local sentiment

The local community in and outside of York, based on informal observation, does not consider the preservation of the York Bridge logical or important. Access, especially scenic access, to that area is of greater value to them than restoration of the current structure. Those views were generally expressed not only in 1977, but again in the past year and week, most recently in a County Commission meeting on August 19.

We judge the situation to warrant no unusual efforts to preserve.

Mitigation Alternatives

We originally concurred in the Department of Highway's suggestion for HAER recording of the structure and suggested, additionally the placement of an historical marker on the old bridge access roadway areas. County sentiment for either locating a sign there or incurring the cost of maintaining it, does not appear to make that mitigation activity worth pursuing. We are satisfied, instead, with the proposal to insure that historical information on the bridge and the HAER photographs and drawings are available in local libraries.

Sincerely,

Marcella Sherfy
Deputy State Historic Preservation Officer

MS/det
cc: Federal Highway Administration
Federal Office Building
301 S. Park, Drawer 10056
Helena, MT 59601
ATTENTION: William Dunbar

Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59601
ATTENTION: Mark Layton

Lewis and Clark County

Office of the County Commissioners
COURTHOUSE, HELENA, MONTANA 59601

JOHN WILKINSON
CHRIS GARDNER
BOB DECKER

PHONE 406 442-6737

August 25, 1980

Mr. L. S. Harris, Manager
Secondary Roads Unit
Department of Highways
2701 Prospect
Helena MT 59601

Dear Buck:

At this time we have no use for the three single-lane spans of the old York Bridge. We are not at all interested in keeping the bridge for foot traffic for fishermen. The bridge represents a continuing liability for the county, and we do not want to continue maintaining it. As we stated in our previous letter, we would prefer that the demolition of the bridge be part of the construction contract for the new York Bridge.

If the bridge is declared a national historic site and a historic marker is placed near the site of the old bridge, Lewis and Clark County would be able to take over maintenance of the marker as part of our regular bridge maintenance duties.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
LEWIS AND CLARK COUNTY

Bob Decker, Chairman

John H. Wilkinson
John H. Wilkinson

Chris Gardner
Chris Gardner

c Jim Ellis

ck

Date Recd [illegible] 5/31/77

Act | Info | [illegible] ROUTE

30

30 [illegible]

31 Contract [illegible]

[illegible] Design

33 [illegible]

34 [illegible]

35 [illegible] Design

[illegible]

Dundas

36 [illegible]

37 P[illegible]

38 [illegible]

39 [illegible] Design

File

York, Montana
May 25, 1977

Public Hearings Unit
Department of Highways
State of Montana
Helena, Montana 59601

Dear Sirs:

Re: DP 72(7)
York Bridge

We submit the following recommendations and comments for your consideration in planning for the construction of the proposed York Bridge:

1. Alternate route one (1) selected for the bridge.

   This route provides easy access on both the east and west approaches with the lowest degree of curvature and will tie in with the existing roadway with little new construction required.

2. Design the proposed bridge as a clear-span structure with no causeway at either end.

   The west end of the proposed bridge is adjacent to one of the most popular camping and boating areas on Hauser Lake. Any obstruction built in the lake would present a hazzard to boaters and particularly to those water skiing in this area. Immediately to the south of the west approach is a natural ramp for launching boats and the shore line is excellent for skiing activities. In addition most causeways seem to become the favorite place for the disposal of trash fish which creates an obnoxious scene as well as odors for anyone enjoying the outdoors.

3. Remove the existing bridge and restore the shoreline to it's natural state.

   If the pillars of the new structure are not designed in-line with those of the existing bridge an obstacle course on the lake will result. The pillars of the existing structure should be removed to a depth where they will present no hazzard during periods when the water level of the lake is lowered.

4. Maintain the existing roadway on the east shoreline between the old and new structures.

   This is a popular area for camping and shore-fishing and continued access could be maintained at little cost.

5. Retain the existing roadway up Trout Creek.

   This is a scenic route which provides access to the Trout Creek and Beaver Creek drainages, often called the 'Figure Eight' drive. Any alteration of the present roadway would be detrimental to the residents of the area, the scenic beauty of the area, and the fish and wildlife.

As residents of the York Community we respectfully request your consideration of the above ideas.

Sincerely,

Edgar J. Lilletvedt
Maxine P. Lilletvedt
Carolyn S Voelkel
Glenn L. Voelkel
James W Strachan Jr.
Bette K. Smith
Bert Merdink
Helen Merdink
Myrtle Hartse
Gladyce E Hartse
R C Casey
Mary Louise Casey
Fred Weber
Martina C. Weber
Robert M Welch
[illegible] L. Welch
Roger F. Griffin
Clara L. Griffin
Eve Grandbois
Del Grandbois

Danny Fickly
Gregory Paul McDonald
Robert B. Lintam
Chris Jorgensen
Ben Smith
David A Pouliot
Mary E Devivier
Thomas J. Shanks
Arvilla Shanks
John Arnold
Wayne R. Johnson
Juanita W. Cooke
Nancy C Etchingham
James W. Strachan
John Woods
Alberta [illegible]
Betty [illegible]
Shirley C. Olson
Betty L. Christensen
Chester S Christensen

Robert W. Christianson

Jerry R Mc

Ben O Thompson

Marlys Weatherwax

Don Bronson

Billie J Bronson

Hamer G. Gibson

Narchita Gibson

Alan W King

Juanita Tickle

David Jatton

Dennis E Scranton

Mrs. Dennis E. Scranton

George R. McCauley

George T [illegible]

Andrew P Bidwell

"Pete" Peterson

Doris Peterson

Hal Johnson

David L. Perlot

Richard R Waugh

Betty S. Waugh

Robert L McCauley

Mildred L. McCauley

Colleen Lubeck

Mail & File

[illegible] DEPARTMENT
[illegible]WAYS

THOMAS L. JUDGE
GOVERNOR

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

HELENA, MONTANA 59601

H. J ANDERSON
DIRECTOR OF HIGHWAYS

May 6, 1976

IN REPLY REFER TO:

DP 72 (7)
York Bridge & Approaches

U. S. Department of Transportation
Federal Highway Administration
501 N. Fee Street
Helena, Montana 59601

08 30.22 A2

Gentlemen:

This is to request your concurrence that neither an Environmental Impact Statement nor a Negative Declaration is required for the subject project and that this Agency Impact Determination is appropriate.

1. LOCATION AND DESCRIPTION OF THE PROPOSED IMPROVEMENT AND ITS SURROUNDING AREA

This project is located in Lewis and Clark County approximately sixteen miles northeast of Helena. The attached maps, Exhibits "A" & "B", show the location of the project with respect to both the entire state and the City of Helena.

The project will involve approximately 1.1 miles of roadway and structure crossing Hauser Lake in the vicinity of the existing bridge. This section of highway is a portion of Federal Aid Secondary Route 280.

The purpose of this project is to improve the safety and efficiency of this highway section through reconstruction. As stated in the attached Letter of Intent dated January 21, 1974, Exhibit "C", the existing highway is in very poor condition with a narrow roadway, bad curves, and poor sight distance. The existing structure was built in 1906 and is well beyond its useful life.

The new highway will be a two-lane facility utilizing two 12-foot driving lanes with 2-foot wide outside shoulders. As shown on the attached Exhibit "E", the majority of the project passes through grazing land. There are no developed recreation areas at this time on the project, however, there is a high potential for recreational use and at present there are areas, see Exhibit "E", which are being used for camping, fishing and boating.

GEORGE VUCANOVICH CHAIRMAN
HELENA

Wm. M. KESSNER VICE CHAIRMAN
BLACK EAGLE

G. R. COONEY
BUTTE

P. L. BACHELLER
BILLINGS

BAXTER LARSON
[illegible]

The existing structure and its related items will be removed along with the obliteration of the approaches to the structure except where the existing roadway could possibly be developed into parking access for local use or recreation.

2. PROBABLE IMPACT

The major impact of this project will be to provide a safe and efficient highway facility that will serve the traveling public. The majority of the project can be built without appreciable disruption of the flow of traffic. New right-of-way will be required for the project, but at this time the exact amount (acres) is not known since the final alignment has not been established. Rough estimates can be made, however. Utilizing the information available at this time alignments 1 and 2 would require about 27 acres. Alignment 3 would require about 26 acres. Alignment 4 would require 25 acres.

It appears that no people or businesses will be displaced as a result of this project. However, if for some reason during future development of this project it becomes necessary to displace people or businesses the Department of Highways has a right-of-way procedure which includes relocation assistance that would be available to the displaced persons. Also, no one would be displaced until adequate replacement housing has been obtained..

No historic sites, natural landmark, parks or wildlife or waterfowl refuges will be affected by this project. There is potential recreational use of the lands along this project, see Exhibit "E", which could be affected by the alternates proposed. Some areas would be affected more than others, depending upon the alignment being considered.

Also, there is presently being studied a ten-mile wide corridor, by the Bureau of Outdoor Recreation, for the proposed Lewis and Clark Trail. The project lies in within this corridor, but the precise location of the trail in the project area has not yet been determined.

Access to religious, educational, cultural, recreational, and employment opportunities will be improved by this project. The project should have minimal, if any effect on the economy of the area except possibly during construction. Construction should aid short term employment in the area which in turn will benefit the area businesses.

3. PROBABLE ADVERSE IMPACTS WHICH CANNOT BE AVOIDED.

Some water pollution will occur during construction. Efforts will be made, however, to keep this to a minimum. The Montana Department of Highways Standard Specifications contain provisions pertaining to this matter that the contractor must follow. Interim erosion control measures will be ncorporated into the project during construction. Also, the contractor will be required to adhere to all state and national laws regarding this matter.

Although air pollution is expected to increase during construction, abatement will be provided by contractor compliance with requirements in the Department of Highways Standard Specifications and special provisions. Watering the road surface and similar measures will be included to alleviate the dust problems associated with highway construction. The contractor will also have to follow all state and national laws regarding this type of pollution.

The Department of Health and Environmental Sciences has reviewed the project and found that there should be no adverse effects on air quality from the construction of the project. A copy of their response to the Letter of Intent is attached.

There are no utilities involved on this project.

Future noise pollution will not be a detrimental factor on this project. Using the NCHRP Report 117 nomograph method, (copy attached, Exhibit "D") it was found that the future L_{10} noise level is 70 dBA at a distance of 40 feet from centerline and there are no structures closer than 100 feet.

4. ALTERNATES

Besides the "No Build" alternate there are four (4) basic alignments proposed for the crossing of Hauser Lake, as shown on Exhibit "E". Consideration is being given to the use of a structure or a combination of structures to cross Hauser Lake and Trout Creek. Also being considered is the use of a causeway on alignments 1 or 3. The vertical clearance between the water surface and the under side of any structure used would not be less than what now exists. The causeway would have a normal horizontal water surface opening of about 240 feet.

The "no-build" alternate would leave the present roadway in its inadequate and inefficient condition to serve the traveling public's increasing needs.

5. RELATIONSHIP BETWEEN SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

The short-term uses of the environment during the construction of this project will not be significant. After construction the flow of traffic will be improved but the overall traffic patterns will not change. Manmade features that will be replaced will be the existing structure over Hauser Lake.

The effect on natural features will be insignificant. The construction process could slightly disrupt the area and cause some traffic delays. This will be short lived and last only as long as it takes to complete the necessary work.

The long-term effect will be the provision of a safe and efficient transportation facility for the public. Although access to some land may be improved, we do not expect this to cause any significant change in land use.

6. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Money, labor, and materials will be irretrievably committed to the project. The land that will be needed for right-of-way will not be available for other use unless a demand greater than that of the roadway and structure requires a change in land use. The use of this land, material, money and other resources is considered to be justified as it will provide a much needed and improved highway facility to serve the traveling public.

7. BASIS FOR DETERMINATION

The attached copy of the "Letter of Intent", Exhibit "C", was sent to all persons and agencies considered to have interest in the project. The mailing list is included with the letter. Following this letter are all comments that were received.

Based on the foregoing it is our opinion that the project does not significantly affect the environment and will not be a major action.

The return of one signed copy of this Agency Impact Determination indicating your concurrence will be appreciated.

Very truly yours,

H. J. ANDERSON
DIRECTOR OF HIGHWAYS

By Stephen C. Kologi
Stephen C. Kologi, P. E., Chief
Preconstruction Bureau

6?

Date MAY 19 1975 I concur HN Stewart
H. N. Stewart, Division Administrator
Federal Highway Administration

32-SCK:CAS:mg
Attachments

FILE
cc: ~~J. R. Beckert~~, ~~W/Attach.~~
D. D. Anderson
R. E. Champion
~~S. C. Kologi~~
K. F. Skoog
R. B. Dundas

Montana Division
Federal Office Building
301 S. Park, Drawer 10056
Helena, Montana 59601

August 21, 1980

HEB-MT 0111a

Mr. Louis S. Wall
Assistant Director
Advisory Council on Historic Preservation
P. O. Box 25085
Denver, Colorado 80225

Dear Mr. Wall:

Subject: DP 280-1(3)11 York Bridge and Approaches

Enclosed please find the Preliminary Case Report complete with attachments plus the Memorandum of Agreement with stipulations signed by the Montana SHPO, DOH and the Federal Highway Administration.

The attachments consist of: a vicinity map photographs, correspondence relating to the determination of eligibility and HAER inventory data cards.

We are requesting the Advisory Council's comments on the Case Report and on the Memorandum of Agreement and it is hoped that the information supplied will suffice as the agency's compliance with 36 CFR 800.

Sincerely yours,

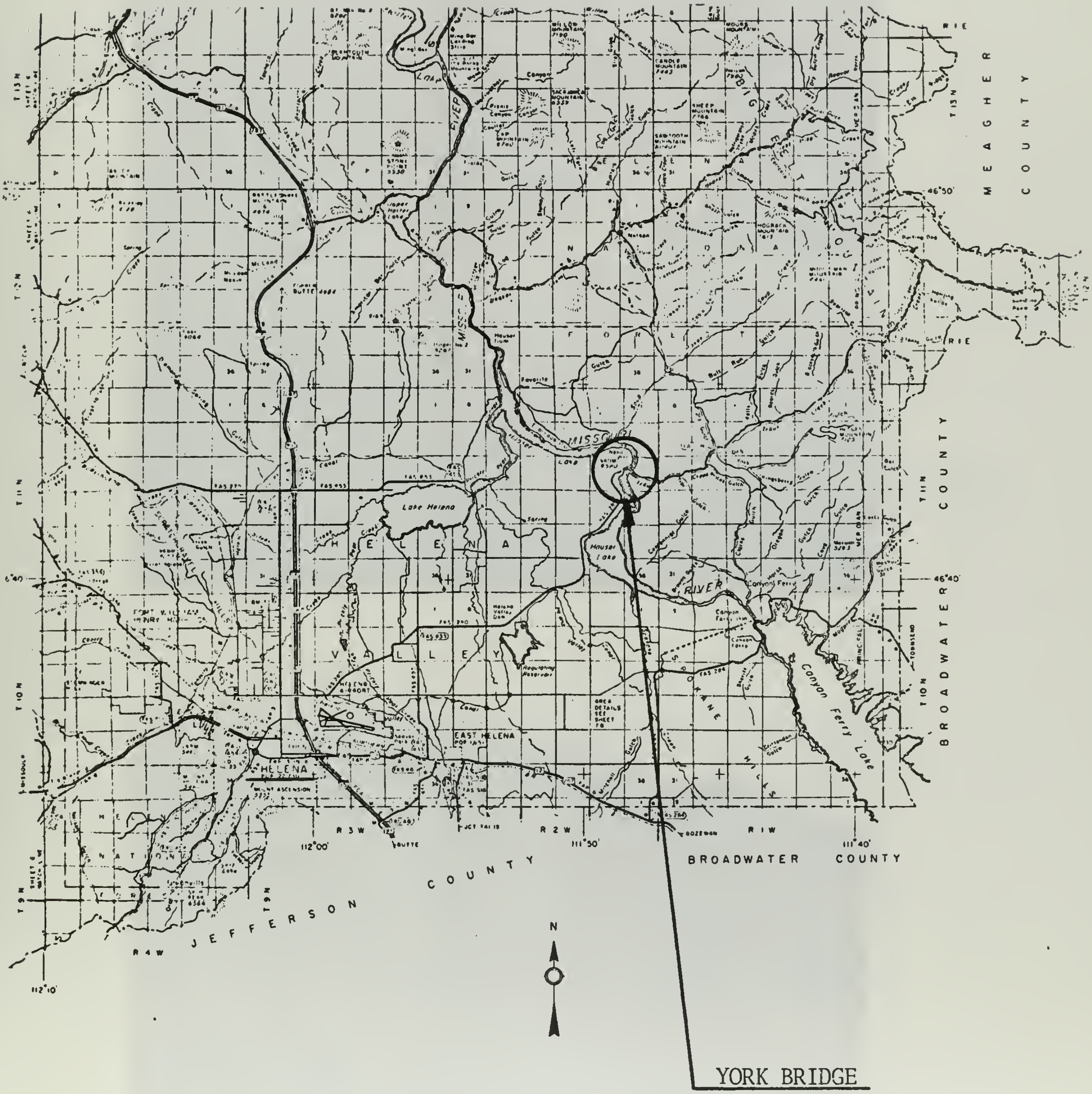
H. J. Anderson /S/

H. N. Stewart
Division Administrator

Enclosures

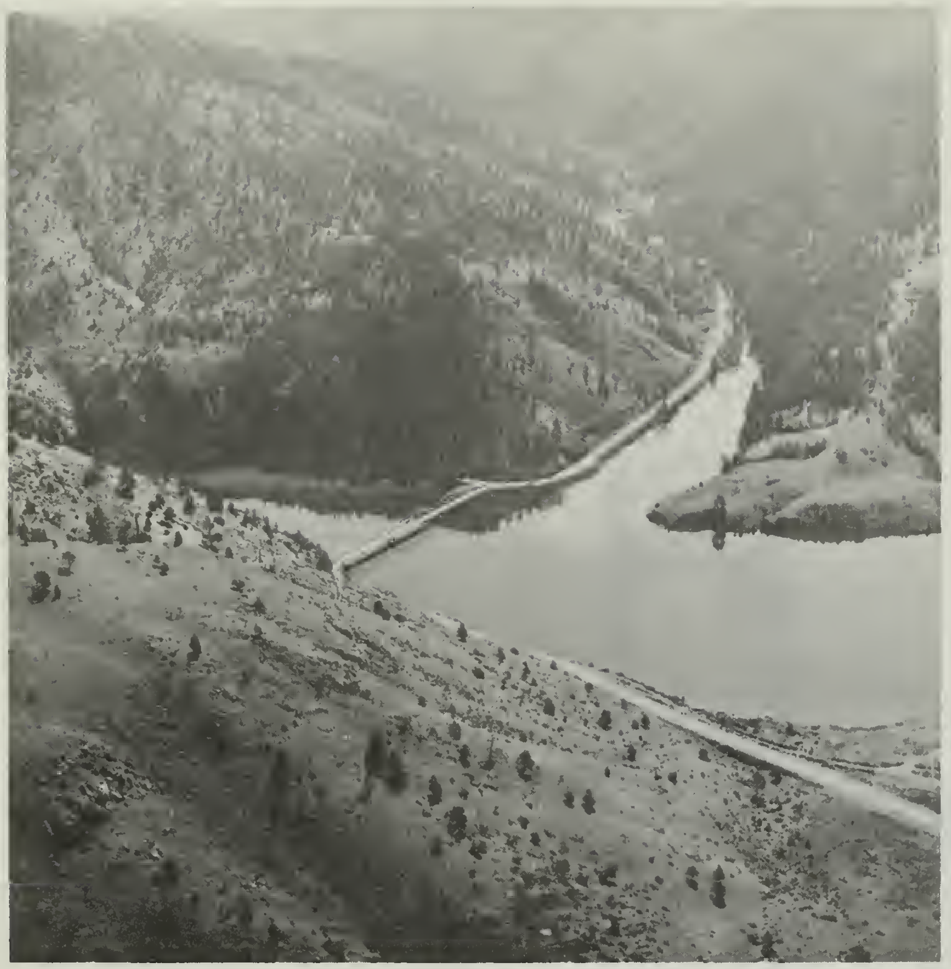
HJ0111a/jem

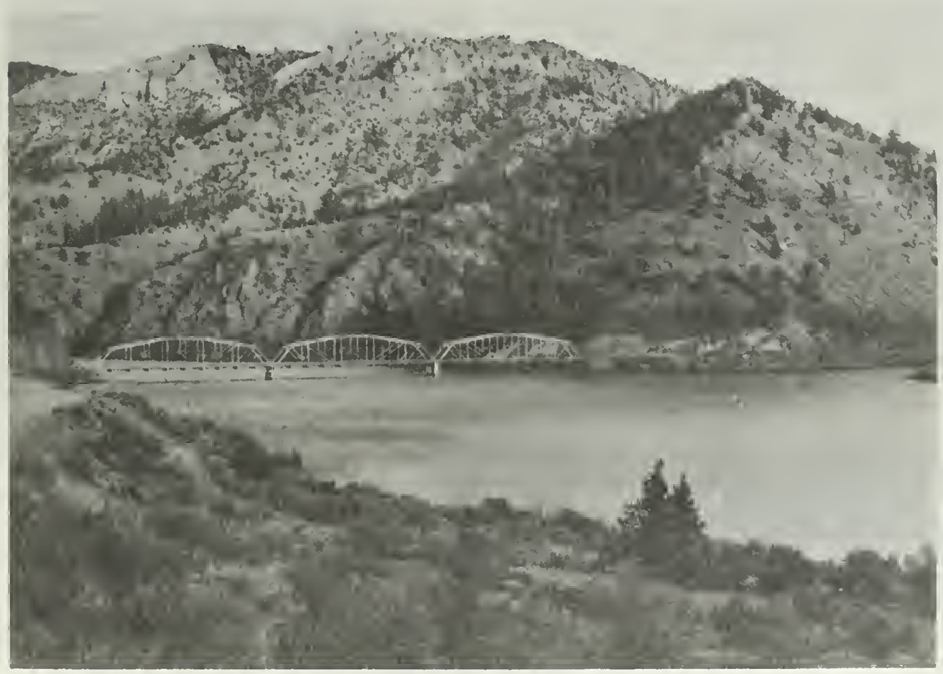
EXHIBIT 1



MEAGHER COUNTY
BROADWATER COUNTY
JEFFERSON COUNTY
MISSOURI RIVER
Lake Helena
HELENA VALLEY
Hauser Lake
Canyon Ferry Lake
HELENA
EAST HELENA
46°50'
46°40'
112°00'
111°50'
111°40'
112°10'
R4W
R3W
R2W
R1W
R1E
T13N
T12N
T11N
T10N
T9N
N
YORK BRIDGE

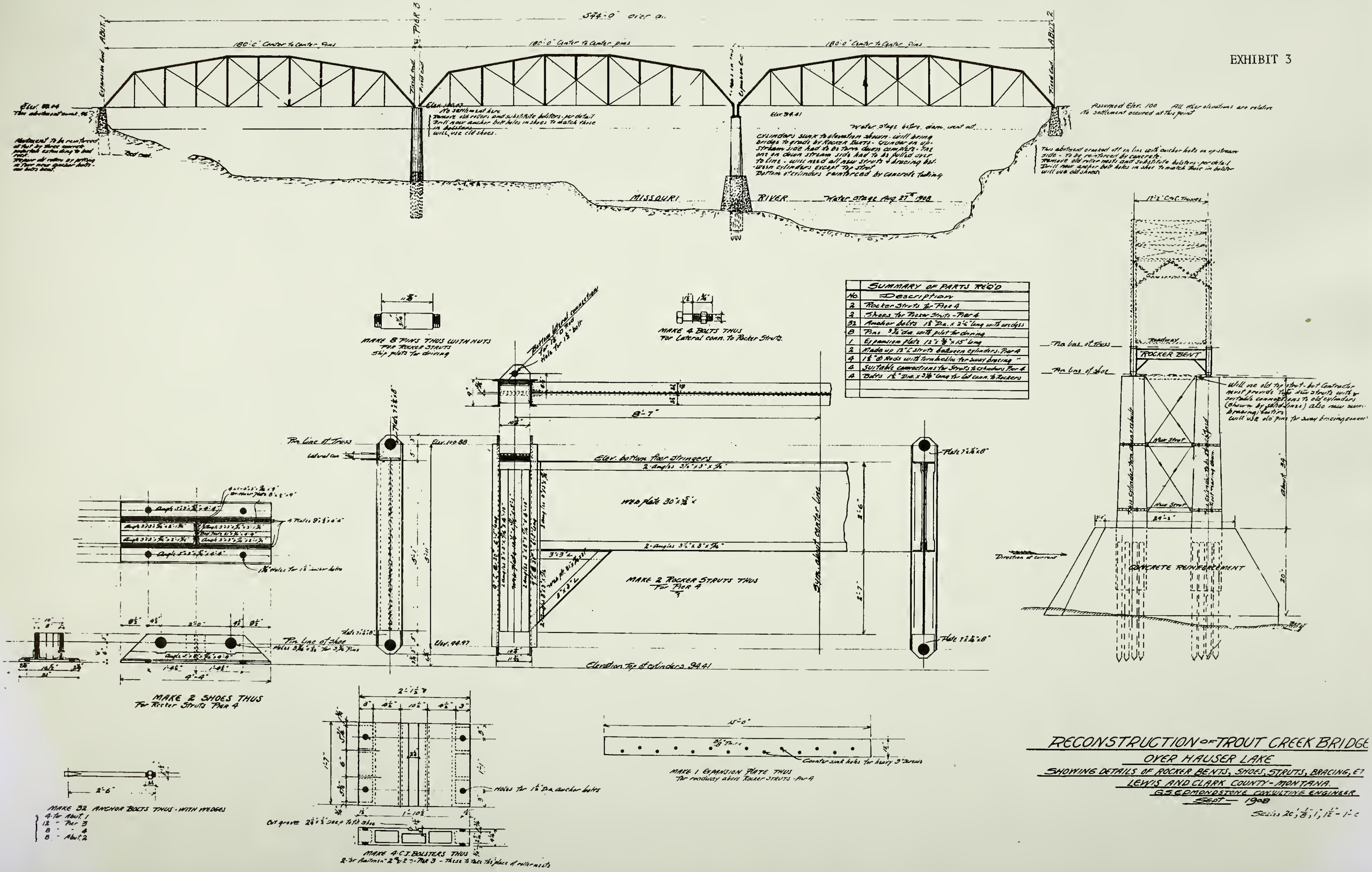
EXHIBIT 2





YORK BRIDGE

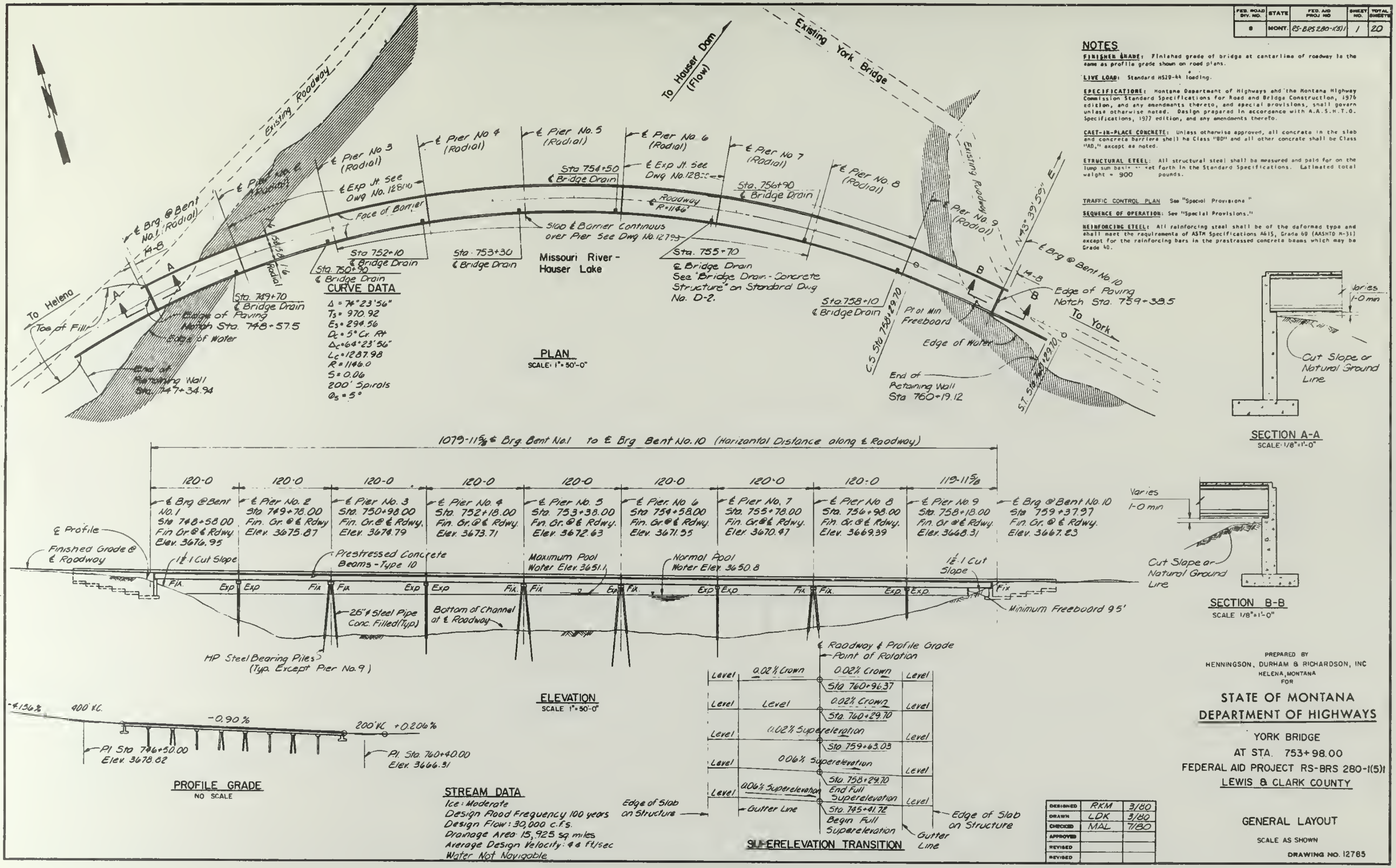
EXHIBIT 3


544'-0" over all
180'-0" Center to Center Pins
180'-0" Center to Center pins
180'-0" Center to Center pins
ABUT. 1
PIER 3
ABUT. 2
Expansion End
Fixed End
Pivot End
Expansion End
Fixed End
Elev. 99.04
This abutment sunk .96
Abutment to be reinforced at foot by three concrete pedestals extending to bed rock.
Repair old rollers by putting in four new anchor bolts - one bolts bent.
Bed rock.
Elev. 100.07
No settlement here
Remove old rollers and substitute bolsters - per detail
Drill new anchor bolt holes in shoes to match those in bolsters
will use old shoes.
Elev. 94.41
Water stage before dam went out
Cylinders sunk to elevation shown - will bring bridge to grade by Rocker Bents - Cylinder on up-stream side had to be torn down complete. The one on down stream side had to be pulled over to line - will need all new struts & bracing between cylinders except top strut
Bottom of cylinders reinforced by concrete footing
MISSOURI
RIVER
Water stage Aug 27th 1908
Assumed Elev. 100 All other elevations are relative
No settlement occured at this point
This abutment cracked off in line with anchor bolts on up-stream side - to be reinforced by concrete.
Remove old roller nests and substitute bolsters - per detail
Drill new anchor bolt holes in shoe to match those in bolster
will use old shoes.
17'-2" C to C Trusses
Roadway
ROCKER BENT
Pin line of Truss
Pin line of Shoe
Will use old top strut - but Contractor must provide two new struts with suitable connections to old cylinders (shown by solid lines) also new sway bracing; [illegible]
Will use old pins for sway bracing conn.
New Strut
New Strut
29'-2"
About 34'
20'
Direction of current
CONCRETE REINFORCEMENT
11 3/8"
MAKE 8 PINS THUS WITH NUTS
FOR ROCKER STRUTS
Ship pilots for driving
Bottom lateral connection
for 1 1/8" Rod
Hole for 1 3/8" bolt
MAKE 4 BOLTS THUS
For Lateral conn. to Rocker Struts.
8'-7"
10 1/2"
Pin Line of Truss
Lateral Con
Elev. 100.88
Elev. bottom floor stringers
2-Angles 3 1/2" x 3" x 7/16"
Web plate 30" x 5/8"
2-Angles 3 1/2" x 3" x 7/16"
MAKE 2 ROCKER STRUTS THUS
For Pier 4
Sym. about center line
3'-6"
3'-7"
5'-1"
5'-11"
Elev. 94.97
Elevation top of cylinders 94.41
Plate 7 1/2" x 3/4" x 8"
Plate 7 1/2" x 3/4" x 8"
4 Plates 9" x 1/2" x 4'-4"
1 3/4" Holes for 1 1/2" anchor bolts
Pin Line of Shoe
Holes 3 7/16" x 1/32" for 3 7/16" Pins
2'-0"
4'-4"
MAKE 2 SHOES THUS
For Rocker Struts Pier 4
2'-1 1/2"
1'-10 1/2"
1'-7"
1'-1"
Holes for 1 1/2" Dia. anchor bolts
Cut grove 2 1/2" x 1/2" deep to fit shoe
MAKE 4 C.I. BOLSTERS THUS
2-3r Abutment 2 & 2 - Pier 3 - These to take the place of roller nests
2'-6"
MAKE 32 ANCHOR BOLTS THUS - WITH WEDGES
4 - for Abut. 1
12 - Pier 3
8 - 4
8 - Abut. 2
15'-0"
5/8" Thick
Counter sunk holes for heavy 3" screws
MAKE 1 EXPANSION PLATE THUS
For roadway above Rocker Struts - Pier 4

	SUMMARY OF PARTS REQ'D
No.	Description
2	Rocker Struts for Pier 4
2	Shoes for Rocker Struts - Pier 4
32	Anchor bolts 1 1/2" Dia. x 2'-6" long with wedges
8	Pins 3 7/16" dia. with pilot for driving
1	Expansion plate 12" x 5/8" x 15' long
2	Made up 12" [struts between cylinders. Pier 4
4	1 1/8" ⌀ Rods with turnbuckles for sway bracing "
4	Suitable connections for Struts to cylinders Pier 4
4	Bolts 1 1/2" Dia. x 3 1/4" long for lat conn. to Rockers

RECONSTRUCTION OF TROUT CREEK BRIDGE
OVER HAUSER LAKE
SHOWING DETAILS OF ROCKER BENTS, SHOES, STRUTS, BRACING, ET
LEWIS AND CLARK COUNTY - MONTANA.
G.S. EDMONDSTONE CONSULTING ENGINEER
Sept — 1908
Scales 20', 1/8", 1", 1 1/2" = 1'-0

EXHIBIT NO.4


Existing Roadway
To Helena
Toe of Fill
To Houser Dam (Flow)
Existing York Bridge
Existing Roadway
N 43° 39' 59" E
To York
℄ Brg @ Bent No.1 (Radial)
℄ Pier No. 2 (Radial)
℄ Pier No 3 (Radial)
℄ Pier No 4 (Radial)
℄ Pier No. 5 (Radial)
℄ Pier No. 6 (Radial)
℄ Pier No 7 (Radial)
℄ Pier No. 8 (Radial)
℄ Pier No. 9 (Radial)
℄ Brg @ Bent No 10
14-8
A
B
1:6 Radial
158|158
℄ Exp Jt. See Dwg No. 12810
℄ Exp Jt. See Dwg No. 128…
Face of Barrier
Sta 754+50 ℄ Bridge Drain
Sta. 756+90 ℄ Bridge Drain
℄ Roadway R=1146'
Slab & Barrier Continuous over Pier See Dwg No. 12793
Sta 752+10 ℄ Bridge Drain
Sta. 750+90 ℄ Bridge Drain
Sta. 753+30 ℄ Bridge Drain
Sta. 749+70 ℄ Bridge Drain
Sta. 755+70 ℄ Bridge Drain See "Bridge Drain - Concrete Structure" on Standard Dwg No. D-2.
Sta. 758+10 ℄ Bridge Drain
Missouri River - Houser Lake
Edge of Paving Notch Sta. 748+57.5
Edge of Water
End of Retaining Wall Sta. 747+34.94
Edge of Paving Notch Sta. 759+38.5
C.S. Sta 758+29.70
S.T. Sta 760+29.70
Pt of Min Freeboard
Edge of Water
End of Retaining Wall Sta 760+19.12
PLAN
SCALE: 1" = 50'-0"
Varies 1-0 min
Cut Slope or Natural Ground Line
SECTION A-A
SCALE 1/8" = 1'-0"
1079-11⅝ ℄ Brg Bent No.1 to ℄ Brg Bent No.10 (Horizontal Distance along ℄ Roadway)
120-0
120-0
120-0
120-0
120-0
120-0
120-0
120-0
119-11⅝
℄ Brg @ Bent No.1 Sta 748+58.00 Fin Gr. @ ℄ Rdwy Elev. 3676.95
℄ Pier No. 2 Sta 749+78.00 Fin. Gr. @ ℄ Rdwy Elev. 3675.87
℄ Pier No. 3 Sta. 750+98.00 Fin. Gr. @ ℄ Rdwy. Elev. 3674.79
℄ Pier No. 4 Sta. 752+18.00 Fin. Gr. @ ℄ Rdwy. Elev. 3673.71
℄ Pier No. 5 Sta. 753+38.00 Fin. Gr. @ ℄ Rdwy. Elev. 3672.63
℄ Pier No 6 Sta 754+58.00 Fin. Gr. @ ℄ Rdwy. Elev. 3671.55
℄ Pier No. 7 Sta. 755+78.00 Fin. Gr. @ ℄ Rdwy. Elev. 3670.47
℄ Pier No 8 Sta. 756+98.00 Fin. Gr. @ ℄ Rdwy. Elev. 3669.39
℄ Pier No 9 Sta. 758+18.00 Fin. Gr. @ ℄ Rdwy. Elev. 3668.31
℄ Brg @ Bent No. 10 Sta 759+37.97 Fin. Gr. @ ℄ Rdwy. Elev. 3667.23
℄ Profile
Finished Grade @ ℄ Roadway
1½:1 Cut Slope
Prestressed Concrete Beams - Type 10
Maximum Pool Water Elev. 3651.1
Normal Pool Water Elev. 3650.8
1½:1 Cut Slope
Fix
Exp
25"ø Steel Pipe Conc. Filled (Typ)
Bottom of Channel at ℄ Roadway
Minimum Freeboard 9.5'
HP Steel Bearing Piles (Typ. Except Pier No. 9)
ELEVATION
SCALE 1" = 50'-0"
Varies 1-0 min
Cut Slope or Natural Ground Line
SECTION B-B
SCALE 1/8" = 1'-0"
-4.136%
400' V.C.
-0.90%
200' V.C.
+0.206%
P.I. Sta 746+50.00 Elev. 3678.62
P.I. Sta. 760+40.00 Elev. 3666.31
PROFILE GRADE
NO SCALE
℄ Roadway & Profile Grade Point of Rotation
Level
0.02% Crown
0.02% Crown
Sta 760+96.37
Level
0.02% Crown
Sta. 760+29.70
0.02% Superelevation
Sta 759+63.03
0.06% Superelevation
Sta. 758+29.70 End Full Superelevation
0.06% Superelevation
Sta. 745+41.72 Begin Full Superelevation
Gutter Line
Edge of Slab on Structure
Gutter Line
Edge of Slab on Structure
SUPERELEVATION TRANSITION

FED. ROAD DIV. NO.	STATE	FED. AID PROJ NO	SHEET NO.	TOTAL SHEETS
8	MONT.	RS-BRS 280-1(5)1	1	20

NOTES

FINISHED GRADE: Finished grade of bridge at centerline of roadway is the same as profile grade shown on road plans.

LIVE LOAD: Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Highways and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1976 edition, and any amendments thereto, and special provisions, shall govern unless otherwise noted. Design prepared in accordance with A.A.S.H.T.O. Specifications, 1977 edition, and any amendments thereto.

CAST-IN-PLACE CONCRETE: Unless otherwise approved, all concrete in the slab and concrete barriers shall be Class "BD" and all other concrete shall be Class "AD," except as noted.

STRUCTURAL STEEL: All structural steel shall be measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated total weight = 900 pounds.

TRAFFIC CONTROL PLAN See "Special Provisions"

SEQUENCE OF OPERATION: See "Special Provisions."

REINFORCING STEEL: All reinforcing steel shall be of the deformed type and shall meet the requirements of ASTM Specifications A615, Grade 60 (AASHTO M-31) except for the reinforcing bars in the prestressed concrete beams which may be Grade 40.

CURVE DATA

$\Delta = 74°23'56"$
$T_s = 970.92$
$E_s = 294.56$
$D_c = 5°$ Cr. Rt
$\Delta_c = 64°23'56"$
$L_c = 1287.98$
$R = 1146.0$
$S = 0.06$
200' Spirals
$\theta_s = 5°$

STREAM DATA

Ice: Moderate
Design Flood Frequency 100 years
Design Flow: 30,000 c.f.s.
Drainage Area: 15,925 sq. miles
Average Design Velocity: 4.6 ft/sec
Water Not Navigable

PREPARED BY
HENNINGSON, DURHAM & RICHARDSON, INC
HELENA, MONTANA
FOR

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

YORK BRIDGE
AT STA. 753+98.00
FEDERAL AID PROJECT RS-BRS 280-1(5)1
LEWIS & CLARK COUNTY

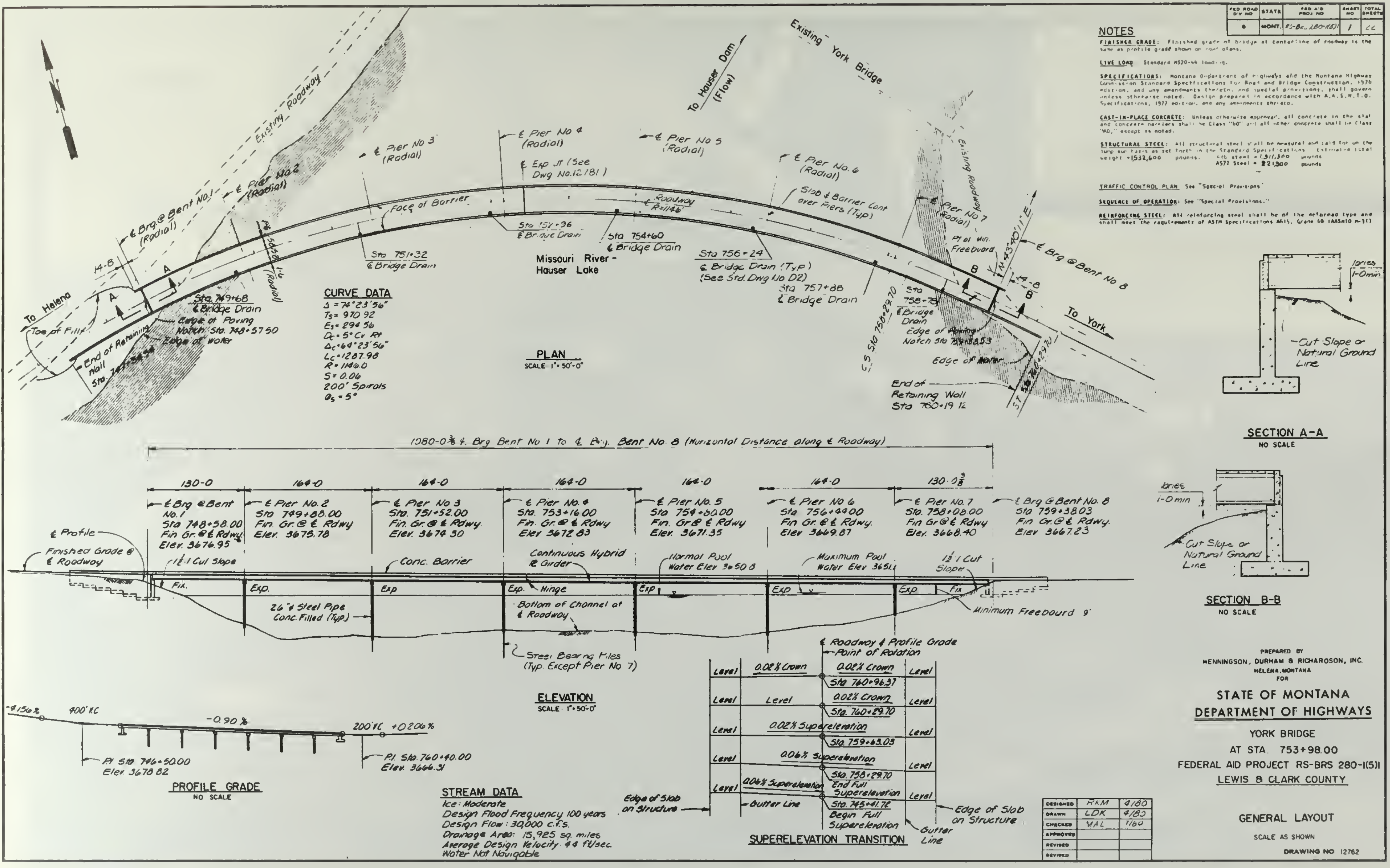
GENERAL LAYOUT

SCALE AS SHOWN

DRAWING NO. 12785

DESIGNED	RKM	3/80
DRAWN	LDK	3/80
CHECKED	MAL	7/80
APPROVED		
REVISED		
REVISED		

EXHIBIT NO.5


Existing York Bridge
To Hauser Dam (Flow)
Existing Roadway
Existing Roadway
℄ Pier No 3 (Radial)
℄ Pier No 4 (Radial)
℄ Exp Jt (See Dwg No.12181)
℄ Pier No 5 (Radial)
℄ Pier No. 6 (Radial)
℄ Pier No 7 (Radial)
℄ Brg @ Bent No 1 (Radial)
℄ Pier No 2 (Radial)
℄ Brg @ Bent No 8
Slab & Barrier Cont over Piers (Typ)
Face of Barrier
Roadway R=1146'
Sta 751+96 ℄ Bridge Drain
Sta 754+60 ℄ Bridge Drain
Sta 751+32 ℄ Bridge Drain
Sta 756+24 ℄ Bridge Drain (Typ) (See Std. Dwg No D2)
Sta 757+88 ℄ Bridge Drain
Sta 758+78 ℄ Bridge Drain
Sta 749+68 ℄ Bridge Drain
Missouri River - Hauser Lake
To Helena
Toe of Fill
End of Retaining Wall
Edge of Paving Notch Sta. 748+57.50
Edge of Water
14-8
1-6 (Radial)
A
B
Pt of Min. Freeboard
N 43°40'11" E
Edge of Paving Notch Sta 759+38.53
Edge of Water
End of Retaining Wall Sta 760+19.12
C.S. Sta 760+29.70
S.T. Sta 760+29.70
To York
PLAN
SCALE 1"=50'-0"
1080-0⅜ ℄ Brg Bent No 1 to ℄ Brg Bent No. 8 (Horizontal Distance along ℄ Roadway)
130-0
164-0
164-0
164-0
164-0
164-0
130-0⅜
℄ Brg @ Bent No. 1 Sta 748+58.00 Fin Gr. @ ℄ Rdwy Elev. 3676.95
℄ Pier No. 2 Sta 749+88.00 Fin. Gr. @ ℄ Rdwy Elev. 3675.78
℄ Pier No 3 Sta. 751+52.00 Fin. Gr. @ ℄ Rdwy. Elev. 3674.30
℄ Pier No. 4 Sta. 753+16.00 Fin. Gr. @ ℄ Rdwy Elev 3672.83
℄ Pier No. 5 Sta 754+80.00 Fin. Gr @ ℄ Rdwy Elev. 3671.35
℄ Pier No 6 Sta 756+44.00 Fin Gr. @ ℄ Rdwy. Elev 3669.87
℄ Pier No. 7 Sta. 758+08.00 Fin Gr @ ℄ Rdwy Elev. 3668.40
℄ Brg @ Bent No. 8 Sta 759+38.03 Fin. Gr. @ ℄ Rdwy. Elev 3667.23
℄ Profile
Finished Grade @ ℄ Roadway
1½:1 Cut Slope
Conc. Barrier
Continuous Hybrid Ⓟ Girder
Normal Pool Water Elev 3650.8
Maximum Pool Water Elev 3651.1
1½:1 Cut Slope
Fix.
Exp.
Exp
Exp.
Hinge
Exp
Exp
Exp
Fix
26" ∅ Steel Pipe Conc. Filled (Typ.)
Bottom of Channel at ℄ Roadway
Steel Bearing Piles (Typ. Except Pier No 7)
Minimum Freeboard 9'
ELEVATION
SCALE 1"=50'-0"
-0.156%
400' VC
-0.90%
200' VC
+0.206%
P.I. Sta 746+50.00 Elev. 3678.82
P.I. Sta. 760+40.00 Elev. 3666.31
PROFILE GRADE
NO SCALE
℄ Roadway & Profile Grade — Point of Rotation
Level
0.02% Crown
0.02% Crown
Sta 760+96.37
Level
Level
0.02% Crown
Level
Sta. 760+29.70
Level
0.02% Superelevation
Level
Sta. 759+63.03
Level
0.06% Superelevation
Level
Sta. 758+29.70 End Full Superelevation
Level
0.06% Superelevation
Level
Sta. 745+41.72 Begin Full Superelevation
Gutter Line
Edge of Slab on Structure
Edge of Slab on Structure
Gutter Line
SUPERELEVATION TRANSITION
Ipries 1-0 min
Cut Slope or Natural Ground Line
SECTION A-A
NO SCALE
Ipries 1-0 min
Cut Slope or Natural Ground Line
SECTION B-B
NO SCALE

FED ROAD DIV NO	STATE	FED AID PROJ NO	SHEET NO	TOTAL SHEETS
8	MONT.	RS-BRS 280-1(5)1	1	66

NOTES

FINISHED GRADE: Finished grade of bridge at centerline of roadway is the same as profile grade shown on road plans.

LIVE LOAD Standard HS20-44 loading.

SPECIFICATIONS: Montana Department of Highways and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1976 edition, and any amendments thereto, and special provisions, shall govern unless otherwise noted. Design prepared in accordance with A.A.S.H.T.O. Specifications, 1977 edition, and any amendments thereto.

CAST-IN-PLACE CONCRETE: Unless otherwise approved, all concrete in the slab and concrete barriers shall be Class "DD" and all other concrete shall be Class "AD," except as noted.

STRUCTURAL STEEL: All structural steel shall be measured and paid for on the lump sum basis as set forth in the Standard Specifications. Estimated total weight =1,532,600 pounds. A36 steel = 1,311,300 pounds
A572 Steel = 221,300 pounds

TRAFFIC CONTROL PLAN See "Special Provisions"

SEQUENCE OF OPERATION: See "Special Provisions."

REINFORCING STEEL: All reinforcing steel shall be of the deformed type and shall meet the requirements of ASTM Specifications A615, Grade 60 (AASHTO M-31)

CURVE DATA

Δ = 74°23'56"
Ts = 970.92
Es = 294.56
Dc = 5° Cr. Rt
Δc = 64°23'56"
Lc = 1287.98
R = 1146.0
S = 0.06
200' Spirals
θs = 5°

STREAM DATA

Ice: Moderate
Design Flood Frequency 100 years
Design Flow: 30,000 c.f.s.
Drainage Area: 15,925 sq. miles
Average Design Velocity 4.4 ft/sec.
Water Not Navigable

PREPARED BY
HENNINGSON, DURHAM & RICHARDSON, INC.
HELENA, MONTANA
FOR

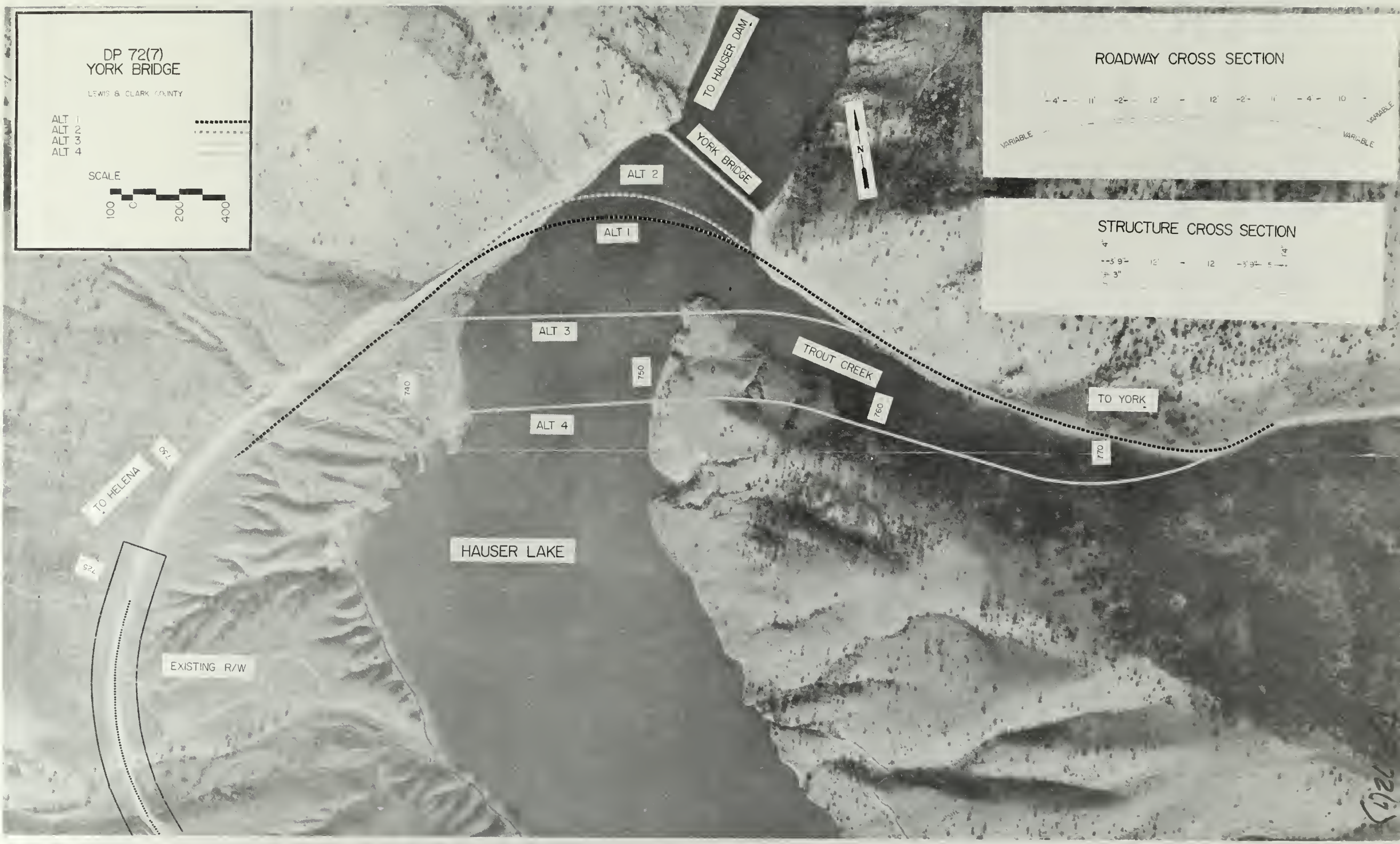
STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

YORK BRIDGE
AT STA. 753+98.00
FEDERAL AID PROJECT RS-BRS 280-1(5)1
LEWIS & CLARK COUNTY

GENERAL LAYOUT
SCALE AS SHOWN
DRAWING NO 12762

DESIGNED	RKM	4/80
DRAWN	LDK	4/80
CHECKED	MAL	7/80
APPROVED		
REVISED		
REVISED		

EXHIBIT 6



72(7)

EXHIBIT 7

E.O. 11593

DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
Heritage Conservation and Recreation Service

Name of property: York Bridge

Location: Lewis & Clark Co. **State:** MT

Request submitted by: DOT-FHWA H. N. Stewart

Date received: 7-11-80 **Additional information received:**

Opinion of the State Historic Preservation Officer:

☒ Eligible ☐ Not Eligible ☐ No Response

Comments:

The Secretary of the Interior has determined that this property is:

☒ Eligible **Applicable criteria:** B,C ☐ Not Eligible

Comments: Although not a unique structure, the York Bridge, dated 1906, is eligible under criteria B and C for listing in the National Register. It is historically important for its associations with the construction of Houser Dam for power and with the local political climate of the time. This bridge was the result of lengthy negotiations and compromise between the county commissioners and the power company.

Architecturally, the bridge is representative of an important engineering type. Although there are other examples extant, York Bridge is significant as a surviving example reflecting the patterns of development of bridge architecture in the early 20th century.

☐ Documentation insufficient
(Please see accompanying sheet explaining additional materials required)

for W. Ray Luce
Keeper of the National Register

Date: 8/21/80

FHR 8-265 2/79

GPO 942 576

EXHIBIT 8

MEMORANDUM OF AGREEMENT

WHEREAS, the Federal Highway Administration (FHWA) proposed to assist the Montana Department of Highways in construction of the York Bridge in Lewis and Clark County, Montana, and

WHEREAS, FHWA has determined that this undertaking as proposed would have an adverse effect upon the existing York Bridge and said bridge being eligible for inclusion in the National Register of Historic Places; and

WHEREAS, pursuant to Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. Sec. 470f, as amended, 90 Stat. 1320) and Section 800.4(d) of the Advisory Council on Historic Preservation (Council) regulations for the "Protection of Historic and Cultural Properties" (36 CFR Part 800), the FHWA has requested the comments of the Council; and

WHEREAS, pursuant to Section 800.6 of the Council's regulations, representatives of the Council, the FHWA, and the Montana SHPO have consulted and reviewed the undertaking to consider feasible and prudent alternatives to avoid or satisfactorily mitigate the adverse effect; and

NOW, THEREFORE, it is mutually agreed that implementation of the undertaking, in accordance with the following stipulations will satisfactorily mitigate any adverse effect on the above-mentioned property.

Stipulations

1.) The York Bridge will be recorded and photographed as recommended by the Historic American Engineering Record and the information forwarded to the HAER. The structure will then be dismantled.

2.) Information from the Historic American Engineering Record along with the original plans of the bridge and other historic information will be bound in booklets and given to the Lewis & Clark Library and the Montana Historical Society Museum.

Federal Highway Administration

Montana Department of Highways

State Historic Preservation Officer

Advisory Council on Historic Preservation

ML/pz/3D

RECEIVED
1990 SEP -8 AM 11: 18
STATE OF MONTANA
DEPT. OF STATE LANDS
AND INVESTMENTS